

## ABSTRACT

This method relates to the system of ATM air traffic management with cooperative aircraft provided with a flight management computer FMS, that are linked by a data transmission system ATN to the control authority and that have presented a flight plan to the control authority. It consists in communicating to the control authority via the ATN link, the projections  $SPWP_{i,j}$  onto the flight plan  $LT_{FP}$  of pseudo-waypoints  $PWP_{i,j}$  introduced by the flight management computer FMS during lateral (between two segments of the flight plan) and/or vertical (between two breaks in slope) softened transitions performed by the aircraft at the time of the changes of instructions appearing in the flight plan  $LT_{FP}$ . By virtue of this information, the control authority estimates more precisely the actual future position of the aircraft and the changes of instruction, thereby enabling it to increase the safety level in particular for the spacing and separation of traffic.